

CRF Errors Corrected by the STIC Systems Branch

Serial Number: 09/341,829A

CRF Processing Date: 3/29/2001

Edited by: 1642

Verified by: 1642

**ENTERED**

RECEIVED

APR 06 2001

TECH CENTER 1600 2900

(8) state

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line
- ☐ Edited a format error in the Current Application Data section, specifically
- ☐ Edited the Current Application Data section with the actual current number. The number input by the applicant was ☐ the prior application data; or ☐ other
- ☐ Added the mandatory heading and subheadings for "Current Application Data"
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place
- ☐ Inserted colons after headings/subheadings. Headings edited included
- ☐ Deleted extra, invalid, headings used by an applicant, specifically
- ☐ Deleted ☐ non ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as
- ☐ Inserted mandatory headings, specifically
- ☐ Corrected an obvious error in the response, specifically
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa
- ☐ Corrected an error in the Number of Sequences field, specifically
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted
- ☐ Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length" field accordingly (error due to a PatentIn bug). Sequences corrected
- ☒ Other: inserted hard return after 21507

Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

2/1/95

## RAW SEQUENCE LISTING

DATE: 04/03/2001

PATENT APPLICATION: US/09/341,829A

TIME: 16:03:04

Input Set A:\Pto.amc

Output Set N:\CRF3\04032001\I341829A.raw

```

3 <110> APPLICANT: Leth,, Bernard
4      Lucas, Sophie
5      De Smet, Charles
6      Godelaine, Daniele
7      Beon-Falleur, Thierry
8 <120> TITLE OF INVENTION: LAGE-1 TUMOR ASSOCIATED NUCLEIC ACIDS
9 <130> FILE REFERENCE: L0461/7066
10 <140> CURRENT APPLICATION NUMBER: US 09/341,829A
11 <141> CURRENT FILING DATE: 1999-10-18
12 <150> PRIOR APPLICATION NUMBER US 08/791,495
13 <151> PRIOR FILING DATE: 1997-01-27
14 <150> PRIOR APPLICATION NUMBER PCI/US98/01445
15 <151> PRIOR FILING DATE: 1998-01-27
W--> 20 <160> NUMBER OF SEQ ID: 14
21 <170> SOFTWARE: FastSEQ for Windows Version 3.0
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 217
24 <212> TYPE: DNA
25 <213> ORGANISM: Homo sapiens
26 <400> SEQUENCE: 1
31 gatctcagaa caccacaaca caaggtctca gaacagagac ctggtacacc aggcccgccg      60
32 ccacccgagg gagccaggg agatgggtgc agaggtgtcg cctttaatgt gatgttctct      120
33 gcccttcaca tttagccgac tgactgctgc agaccaccgc caactgcagc tctccatcag      180
34 ctccctgtctc cagcagcttt cctgtttgat gtggatc      217
37 <210> SEQ ID NO: 2
38 <211> LENGTH: 18
39 <212> TYPE: DNA
40 <213> ORGANISM: Homo sapiens
41 <400> SEQUENCE 2
43 agatgggtgc agaggtgt      18
46 <210> SEQ ID NO: 3
47 <211> LENGTH: 19
48 <212> TYPE: DNA
49 <213> ORGANISM: Homo sapiens
50 <400> SEQUENCE: 3
52 gatccacatc aacagggaa      19
55 <210> SEQ ID NO: 4
56 <211> LENGTH: 1002
57 <212> TYPE: DNA
58 <213> ORGANISM: Homo sapiens
59 <220> FEATURE:
60 <221> NAME/KEY: CDS
61 <222> LOCATION (65)..(697)
62 <400> SEQUENCE: 4
65 tctgcttcag catcctctgtg gcccttgacc ttctctctga gagccgggca gaggtccgg      60
66 agcc atg cag gcc gaa gcc cag gcc aca ggg ggt tcg acg gcc gat gct      109
67 Met Gln Ala Glu Gly Gln Gly Thr Gly Gly Ser Thr Gly Asp Ala

```

## RAW SEQUENCE LISTING

DATE: 04/03/2001

PATENT APPLICATION: US/09/341,829A

TIME 16:03:04

Input Set : A:\Pto.amc

Output Set: N:\CRF3\04032001\I341829A.raw

```

68      1      5      10      15
70 gat ggc cca gga ggc cct ggc att cct gat ggc cca ggc ggc aat gct 157
71 Asp Gly Pro Gly Gly Pro Gly Ile Pro Asp Gly Pro Gly Gly Asn Ala
72      20      25      30
74 ggc ggc cca gga gag gag ggt gcc acg ggc ggc aga ggt ccc cgg ggc 205
75 Gly Gly Pro Gly Glu Ala Gly Ala Thr Gly Gly Arg Gly Pro Arg Gly
76      35      40      45
78 gca ggc gca gca agg gcc tgg ggg ccg aga gga ggc gcc ccg cgg ggt 253
79 Ala Gly Ala Ala Arg Ala Ser Gly Pro Arg Gly Gly Ala Pro Arg Gly
80      50      55      60
82 ccg cat ggc ggt gcc gct tct gcg cag gat gga agg tgc ccc tgc ggc 301
83 Pro His Gly Gly Ala Ala Ser Ala Gln Asp Gly Arg Cys Pro Cys Gly
84      65      70      75
86 gcc agg agg ccg gac agc cgc ctg ctt cag ttg cac atc acc atg cct 349
87 Ala Arg Arg Pro Asp Ser Arg Leu Leu Gln Asp Gly Arg Cys Pro Cys Gly
88 80      85      90      95
90 ttc tgg tgg ccc atg gaa gag gag ctg gtc cgc agg atc ctg tcc cgg 397
91 Phe Ser Ser Pro Met Glu Ala Glu Leu Val Arg Arg Ile Leu Ser Arg
92      100      105      110
94 gat gcc gca cct ctc ccc cga cca ggc gcg gtt ctg aag gac ttc acc 445
95 Asp Ala Ala Pro Leu Pro Arg Pro Gly Ala Val Leu Lys Asp Phe Thr
96      115      120      125
98 gtg tcc gcc aac cta ctg ttt atg tca gtt cgg gac cag gac agg gaa 493
99 Val Ser Gly Asn Leu Leu Phe Met Ser Val Arg Asp Gln Asp Arg Glu
100      130      135      140
102 gcc gct ggc cgg atg agg gtg gtg ggt tgg ggc ctg gga tcc gcc tcc 541
103 Gly Ala Gly Arg Met Arg Val Val Gly Trp Gly Leu Gly Ser Ala Ser
104      145      150      155
106 ccg gag ggc cag aaa gct aga gat ctc aga aca ccc aaa cac aag gtc 589
107 Pro Glu Gly Gln Lys Ala Arg Asp Leu Arg Thr Pro Lys His Lys Val
108 160      165      170      175
110 tca gaa cag aga cct ggt aca cca ggc ccg ccg cca ccc gag gga gcc 637
111 Ser Glu Gln Arg Pro Gly Thr Pro Gly Pro Pro Pro Pro Glu Gly Ala
112      180      185      190
114 cag gga gat ggc tgc aga ggt gtc gcc ttt aat gtg atg ttc tct gcc 685
115 Gln Gly Asp Gly Cys Arg Gly Val Ala Phe Asn Val Met Phe Ser Ala
116      195      200      205
118 cct cac att tagccgactg actgtgtcag accaccgcca actgcagctc 734
119 Pro His Ile
120      210
122 ccacacagct cctgtctcca gcagctttcc ctgttgatgt ggatcacgca gtgctttctg 794
123 ccggtgtttt tgcctcaggc tccctcaggg cagaggcgtt aagcccagcc tggcgccct 854
124 tccaggtcca tgcctcctcc cctagggaat ggtcccagca cgagtggcca gttaattgtg 914
125 ggggctgat tgtttgttgc tggaggagga cggcttacat gttgtttct gtagaaaata 974
126 aagctgagct acgatccga aaaaaaaaa 1002
129 (210) SEQ ID NO 5
130 (211) LENGTH: 210
131 (212) TYPE: PRT
132 (213) ORGANISM: Homo sapiens

```

## RAW SEQUENCE LISTING

DATE: 04/03/2001

PATENT APPLICATION: US/09/341,829A

TIME: 16:03:04

Input Set : A:\Pto.amc

Output Set N:\CRF3\04032001\I341829A.raw

134 &lt;400&gt; SEQUENCE: 5

```

135 Met Gln Ala Glu Gly Gln Gly Thr Gly Gly Ser Thr Gly Asp Ala Asp
136   1           5           10           15
138 Gly Pro Gly Gly Pro Gly Ile Pro Asp Gly Pro Gly Gly Asn Ala Gly
139           20           25           30
141 Gly Pro Gly Glu Ala Gly Ala Thr Gly Gly Arg Gly Pro Arg Gly Ala
142           35           40           45
144 Gly Ala Ala Arg Ala Ser Gly Pro Arg Gly Gly Ala Pro Arg Gly Pro
145           50           55           60
147 His Gly Gly Ala Ala Ser Ala Gln Asp Gly Arg Cys Pro Cys Gly Ala
148           65           70           75           80
150 Arg Arg Pro Asp Ser Arg Leu Leu Gln Leu His Ile Thr Met Pro Phe
151           85           90           95
153 Ser Ser Pro Met Glu Ala Glu Leu Val Arg Arg Ile Leu Ser Arg Asp
154           100          105          110
156 Ala Ala Pro Leu Pro Arg Pro Gly Ala Val Leu Lys Asp Phe Thr Val
157           115          120          125
159 Ser Gly Asn Leu Leu Phe Met Ser Val Arg Asp Gln Asp Arg Glu Gly
160           130          135          140
162 Ala Gly Arg Met Arg Val Val Gly Trp Gly Leu Gly Ser Ala Ser Pro
163 145           150          155          160
165 Glu Gly Gln Lys Ala Arg Asp Leu Arg Thr Pro Lys His Lys Val Ser
166           165          170          175
168 Glu Gln Arg Pro Gly Thr Pro Gly Pro Pro Pro Pro Glu Gly Ala Gln
169           180          185          190
171 Gly Asp Gly Cys Arg Gly Val Ala Phe Asn Val Met Phe Ser Ala Pro
172           195          200          205

```

174 His Ile

175 210

178 &lt;210&gt; SEQ ID NO: 6

179 &lt;211&gt; LENGTH: 632

180 &lt;212&gt; TYPE: DNA

181 &lt;213&gt; ORGANISM: Homo sapiens

183 &lt;220&gt; FEATURE:

184 &lt;221&gt; NAME/KEY: CDS

185 &lt;222&gt; LOCATION (53) ..(595)

187 &lt;400&gt; SEQUENCE 6

```

188 tctctgtggg ccttgacctt ctctctgaga gccgggcaga ggcctcggag cc atg           55
189                                     Met
190                                     1
192 cag gcc gaa ggc cag gcc aca ggg ggt tcg acg ggc gat gct gat gcc           103
193 Gln Ala Glu Gly Gln Gly Thr Gly Gly Ser Thr Gly Asp Ala Asp Gly
194           5           10           15
196 cca gga ggc cct gcc att cct gat gcc cca ggg ggc aat gct gcc gcc           151
197 Pro Gly Gly Pro Gly Ile Pro Asp Gly Pro Gly Gly Asn Ala Gly Gly
198           20           25           30
200 cca gga gag gcg ggt gcc acg gcc gcc aga ggt ccc cgg gcc gca ggg           199
201 Pro Gly Glu Ala Gly Ala Thr Gly Gly Arg Gly Pro Arg Gly Ala Gly
202           35           40           45

```

## RAW SEQUENCE LISTING

DATE: 04/03/2001

PATENT APPLICATION: US/09/341,829A

TIME: 16:03:04

Input Set : A:\Pto.amc

Output Set: N:\CRF3\04032001\I341829A.raw

```

244 gca gca agg gcc tgg ggg cgg aga gga ggc gcc cgg cgg ggt cgg cat      247
245 Ala Ala Arg Ala Ser Gly Pro Arg Gly Gly Ala Pro Arg Gly Pro His
246 50 55 60 65
248 ggc ggt gcc gct tct gcc cag gat gga agg tgc ccc tgc ggg gcc agg      295
249 Gly Gly Ala Ala Ser Ala Gln Asp Gly Arg Cys Pro Cys Gly Ala Arg
250 70 75 80
252 agg cgg gac agc cgc ctg ctt cag ttg cag atc acg atg cct ttc tgg      343
253 Arg Pro Asp Ser Arg Leu Leu Gln Leu His Ile Thr Met Pro Phe Ser
254 85 90 95
256 tgg ccc atg gaa ggc gag ctg gtc cgc agg atc ctg tcc cgg gat gcc      391
257 Ser Pro Met Glu Ala Glu Leu Val Arg Arg Ile Leu Ser Arg Asp Ala
258 100 105 110
260 gca cct ctc ccc cga cca ggg ggc gtt ctg aag gac ttc acc gtg tcc      439
261 Ala Pro Leu Pro Arg Pro Gly Ala Val Leu Lys Asp Phe Thr Val Ser
262 115 120 125
264 ggc aac cta ctg ttt atc cga ctg act gct gca gac cac cgc caa ctg      487
265 Gly Asn Leu Leu Phe Ile Arg Leu Thr Ala Ala Asp His Arg Gln Leu
266 130 135 140 145
268 cag ctc tcc atc agc tcc tgt ctc cag cag ctt tcc ctg ttg atg tgg      535
269 Gln Leu Ser Ile Ser Ser Cys Leu Gln Gln Leu Ser Leu Leu Met Trp
270 150 155 160
272 atc acg cag tgc ttt ctg ccc gtg ttt ttg gct cag gct ccc tca ggg      583
273 Ile Thr Gln Cys Phe Leu Pro Val Phe Leu Ala Gln Ala Pro Ser Gly
274 165 170 175
276 cag agg cgc taagccacgc ctggcgcccc ttcctagggtc atgcctctc      632
277 Gln Arg Arg
278 180
241 <210> SEQ ID NO: 7
242 <211> LENGTH: 180
243 <212> TYPE: PRT
244 <213> ORGANISM: Homo sapiens
246 <400> SEQUENCE: 7
247 Met Gln Ala Glu Gly Gln Gly Thr Gly Gly Ser Thr Gly Asp Ala Asp
248 1 5 10 15
250 Gly Pro Gly Gly Pro Gly Ile Pro Asp Gly Pro Gly Gly Asn Ala Gly
251 20 25 30
253 Gly Pro Gly Glu Ala Gly Ala Thr Gly Gly Arg Gly Pro Arg Gly Ala
254 35 40 45
256 Gly Ala Ala Arg Ala Ser Gly Pro Arg Gly Gly Ala Pro Arg Gly Pro
257 50 55 60
259 His Gly Gly Ala Ala Ser Ala Gln Asp Gly Arg Cys Pro Cys Gly Ala
260 65 70 75 80
262 Arg Arg Pro Asp Ser Arg Leu Leu Gln Leu His Ile Thr Met Pro Phe
263 85 90 95
265 Ser Ser Pro Met Glu Ala Glu Leu Val Arg Arg Ile Leu Ser Arg Asp
266 100 105 110
268 Ala Ala Pro Leu Pro Arg Pro Gly Ala Val Leu Lys Asp Phe Thr Val
269 115 120 125
271 Ser Gly Asn Leu Leu Phe Ile Arg Leu Thr Ala Ala Asp His Arg Gln

```

## RAW SEQUENCE LISTING

DATE: 04/03/2001

PATENT APPLICATION: US/09/341,829A

TIME: 16:03:04

Input Set A:\Pto.amc

Output Set N:\CRF3\04032001\I341829A.raw

```

272      130      135      140
274 Leu Gln Leu Ser Ile Ser Ser Cys Leu Gln Gln Leu Ser Leu Leu Met
275 145      150      155      160
277 Trp Ile Thr Gln Cys Phe Leu Pro Val Phe Leu Ala Gln Ala Pro Ser
278      165      170      175
280 Gly Gln Arg Arg
281      180
284 <210> SEQ ID NO: 8
285 <211> LENGTH: 755
286 <212> TYPE: DNA
287 <213> ORGANISM Homo sapiens
289 <220> FEATURE:
290 <221> NAME/KEY CDS
291 <222> LOCATION: (51)..(593)
293 <400> SEQUENCE: 8
294 ctcgtggggc ctgaccttct ctctgagagc cgggcagagg ctccggagcc atg cag      56
295      Met Gln
296      1
298 gcc gaa ggc cgg ggc aca ggg ggt tcg acg ggc gat gct gat gcc cca      104
299 Ala Glu Gly Arg Gly Thr Gly Gly Ser Thr Gly Asp Ala Asp Gly Pro
300      5      10      15
302 gga gcc cct gcc att cct gat gcc cca ggg gcc aat gct gcc gcc cca      152
303 Gly Gly Pro Gly Ile Pro Asp Gly Pro Gly Gly Asn Ala Gly Gly Pro
304      20      25      30
306 gga gag gcg ggt gcc acg gcc gcc aga ggt ccc cgg gcc gca ggg gca      200
307 Gly Glu Ala Gly Ala Thr Gly Gly Arg Gly Pro Arg Gly Ala Gly Ala
308 35      40      45      50
310 gca agg gcc tcg ggg ccg gga gga gcc gcc ccg cgg ggt ccg cat gcc      248
311 Ala Arg Ala Ser Gly Pro Gly Gly Gly Ala Pro Arg Gly Pro His Gly
312      55      60      65
314 gcc gcg gct tca ggg ctg aat gga tgc tgc aga tgc ggg gcc agg ggg      296
315 Gly Ala Ala Ser Gly Leu Asn Gly Cys Cys Arg Cys Gly Ala Arg Gly
316      70      75      80
318 ccg gag agc cgc ctg ctt gag ttc tac ctc gcc atg cct ttc gcc aca      344
319 Pro Glu Ser Arg Leu Leu Glu Phe Tyr Leu Ala Met Pro Phe Ala Thr
320      85      90      95
322 ccc atg gaa gca gag ctg gcc cgc agg agc ctg gcc cag gat gcc cca      392
323 Pro Met Glu Ala Glu Leu Ala Arg Arg Ser Leu Ala Gln Asp Ala Pro
324      100      105      110
326 ccg ctt ccc gtg cca ggg gtg ctt ctg aag gag ttc act gtg tcc gcc      440
327 Pro Leu Pro Val Pro Gly Val Leu Leu Lys Glu Phe Thr Val Ser Gly
328 115      120      125      130
330 aac ata ctg act atc cga ctg act gct gca gac cac cgc caa ctg cag      488
331 Asn Ile Leu Thr Ile Arg Leu Thr Ala Ala Asp His Arg Gln Leu Gln
332      135      140      145
334 ctc tcc atc agc tcc tgt ctc cag cag ctt tcc ctg ttg atg tgg atc      536
335 Leu Ser Ile Ser Ser Cys Leu Gln Gln Leu Ser Leu Leu Met Trp Ile
336      150      155      160
338 acg cag tgc ttt ctg ccc gtg ttt ttg gct cag cct ccc tca ggg cag      584

```

VERIFICATION SUMMARY

DATE: 04/03/2001

PATENT APPLICATION: US/09/341,829A

TIME: 16:03:05

Input Set : A:\Pto.amc

Output Set: N:\CRF3\04032001\I341829A.raw

L:20 M:283 W: Missing Blank Line separator, <160> field identifier

1642

## RAW SEQUENCE LISTING

DATE: 03/29/2001

PATENT APPLICATION: US/09/341,829A

TIME: 11:14:54

Input Set : A:\es.txt

Output Set: N:\CRF3\03292001\I341829A.raw

4 <110> APPLICANT: Leth,, Bernard  
 5 Lucas, Sophie  
 6 Dr Smet, Charles  
 7 Godelaine, Daniele  
 8 Bon-Falleur, Thierry  
 10 <120> TITLE OF INVENTION: LAGE-1 TUMOR ASSOCIATED NUCLEIC ACIDS  
 12 <130> FILE REFERENCE: L0461/7066  
 14 <140> CURRENT APPLICATION NUMBER: US 09/341,829A  
 15 <141> CURRENT FILING DATE: 1999-10-18  
 17 <150> PRIOR APPLICATION NUMBER: US 08/791,495 <151> 1997-01-27  
 W--> 18 <150> PRIOR APPLICATION NUMBER: PCT/US98/01445 <151> 1998-01-27  
 W--> 19 <160> NUMBER OF SEQ ID: 14  
 21 <170> SOFTWARE: FastSEQ for Windows Version 3.0  
 24 <210> SEQ ID NO: 1  
 25 <211> LENGTH: 217  
 26 <212> TYPE: DNA  
 27 <213> ORGANISM: Homo sapiens  
 29 <400> SEQUENCE: 1  
 30 gatctcagaa caccacaaca caaggtctca gaacagagac ctggtacacc aggccgcgcg 60  
 31 ccaccgcagg gagcccagg agatgggtgc agaggtgtcg cctttaatgt gatgttctct 120  
 32 gccctctaca tttagccgac tgactgctgc agaccaccgc caactgcagc tctccatcag 180  
 33 ctctgtgttc cagcagcttt cctgttgat gtggatc 217  
 36 <210> SEQ ID NO: 2  
 37 <211> LENGTH: 18  
 38 <212> TYPE: DNA  
 39 <213> ORGANISM: Homo sapiens  
 41 <400> SEQUENCE: 2  
 42 agatgggtgc agaggtgt 18  
 45 <210> SEQ ID NO: 3  
 46 <211> LENGTH: 19  
 47 <212> TYPE: DNA  
 48 <213> ORGANISM: Homo sapiens  
 50 <400> SEQUENCE: 3  
 51 gatccagatc aacaggga 19  
 54 <210> SEQ ID NO: 4  
 55 <211> LENGTH: 1002  
 56 <212> TYPE: DNA  
 57 <213> ORGANISM: Homo sapiens  
 59 <220> FEATURE:  
 60 <221> NAME/KEY: CDS  
 61 <222> LOCATION: (65)..(697)  
 63 <400> SEQUENCE: 4  
 64 ttctctctga gaccgggca gaggtccgg 60  
 65 agcc atc cag gcc gaa gcc cag gcc aca ggg ggt tcg acg gcc gat gct 109  
 66 Met Gln Ala Glu Gly Gln Gly Thr Gly Ser Thr Gly Asp Ala  
 67 1 5 10 15  
 69 gat gcc cca gga gcc cct gcc att cct gat gcc cca ggg gcc aat gct 157



## RAW SEQUENCE LISTING

DATE: 03/29/2001

PATENT APPLICATION: US/09/341,829A

TIME: 11 14:54

Input Set : A:\es.txt

Output Set: N:\CRF3\03292001\I341829A.raw

```

70 Asp Gly Pro Gly Gly Pro Gly Ile Pro Asp Gly Pro Gly Gly Asn Ala
71          20          25          30
72 ggc ggc gca gga gag gcg ggt gcc acg ggc ggc aga ggt ccc cgg ggc      205
73 Gly Gly Pro Gly Glu Ala Gly Ala Thr Gly Gly Arg Gly Pro Arg Gly
74          35          40          45
75 gca ggg gca gca aag gcc tgg ggg ccg aga gga ggc gcc ccg cgg ggt      253
76 Ala Gly Ala Ala Arg Ala Ser Gly Pro Arg Gly Gly Ala Pro Arg Gly
77          50          55          60
78 cag cat ggc ggt gcc gct tct gcg cag gat gga agc tgc ccc tgc ggg      301
79 Pro His Gly Gly Ala Ala Ser Ala Gln Asp Gly Arg Cys Pro Cys Gly
80          65          70          75
81 gcc agg agg ccg gac agc cgc ctg ctt cag ttg cac atc acg atg cct      349
82 Ala Arg Arg Pro Asp Ser Arg Leu Leu Gln Leu His Ile Thr Met Pro
83          80          85          90          95
84 ttc tgg tgg ccc atg gaa gag gag ctg gtc cgc agg atc ctg tcc cgg      397
85 Phe Ser Ser Pro Met Glu Ala Glu Leu Val Arg Arg Ile Leu Ser Arg
86          100          105          110
87 gat gcc gca cct ctc ccc cga cca ggg gcg gtt ctg aag gac ttc acc      445
88 Asp Ala Ala Pro Leu Pro Arg Pro Gly Ala Val Leu Lys Asp Phe Thr
89          115          120          125
90 gtg tcc ggc aac cta ctg ttt atg tca gtt cgg gac cag gac agg gaa      493
91 Val Ser Gly Asn Leu Leu Phe Met Ser Val Arg Asp Gln Asp Arg Glu
92          130          135          140
93 ggc gct ggg cgg atg agg gtg gtg ggt tgg ggg ctg gga tcc gcc tcc      541
94 Gly Ala Gly Arg Met Arg Val Val Gly Trp Gly Leu Gly Ser Ala Ser
95          145          150          155
96 ccg gag ggg cag aaa gct aga gat ctc aga aca ccc aaa cac aag gtc      589
97 Pro Glu Gly Gln Lys Ala Arg Asp Leu Arg Thr Pro Lys His Lys Val
98          160          165          170          175
99 tca gaa cag aga cct ggt aca cca gcc ccg ccg cca ccc gag gga gcc      637
100 Ser Glu Gln Arg Pro Gly Thr Pro Gly Pro Pro Pro Pro Glu Gly Ala
101          180          185          190
102 cag gga gat ggg tgc aga ggt gtc gcc ttt aat gtg atg ttc tct gcc      685
103 Gln Gly Asp Gly Cys Arg Gly Val Ala Phe Asn Val Met Phe Ser Ala
104          195          200          205
105 cct cac att tagccgactg actgctgcag accaccgcca actgcagctc      734
106 Pro His Ile
107          210
108 tccatcagct cctgtctcca gcagctttcc ctgttgatgt ggatcacgca gtgctttctg      794
109 cccgtgtttt tggctcaggc tccctcaggg cagaggcgtt aagcccagcc tggcgccct      854
110 tccataggtea tgcctctccc cctaggaat ggtcccagca cgagtggcca gttcattgtg      914
111 ggggctgat tgtttgtcgc tggaggagga cggcttacct gttgtttct gtagaaaata      974
112 aagctgagct acgattccga aaaaaaaa      1002
128 #210: SEQ ID NO: 5
129 #211: LENGTH: 210
130 #212: TYPE: PRT
131 #213: ORGANISM: Homo sapiens
133 #400: SEQUENCE: 5
134 Met Gln Ala Glu Gly Gln Gly Thr Gly Gly Ser Thr Gly Asp Ala Asp

```

## RAW SEQUENCE LISTING

DATE: 03/29/2001

PATENT APPLICATION: US/09/341,829A

TIME: 11:14:54

Input Set : A:\es.txt

Output Set : N:\CRF3\03292001\I341829A.raw

```

135      1              5              10              15
137 Gly Pro Gly Gly Pro Gly Ile Pro Asp Gly Pro Gly Gly Asn Ala Gly
138      20              25              30
140 Gly Pro Gly Glu Ala Gly Ala Thr Gly Gly Arg Gly Pro Arg Gly Ala
141      35              40              45
143 Gly Ala Ala Arg Ala Ser Gly Pro Arg Gly Gly Ala Pro Arg Gly Pro
144      50              55              60
146 His Gly Gly Ala Ala Ser Ala Gln Asp Gly Arg Cys Pro Cys Gly Ala
147      65              70              75              80
149 Arg Arg Pro Asp Ser Arg Leu Leu Gln Leu His Ile Thr Met Pro Phe
150      85              90              95
152 Ser Ser Pro Met Glu Ala Glu Leu Val Arg Arg Ile Leu Ser Arg Asp
153      100             105             110
155 Ala Ala Pro Leu Pro Arg Pro Gly Ala Val Leu Lys Asp Phe Thr Val
156      115             120             125
158 Ser Gly Asn Leu Leu Phe Met Ser Val Arg Asp Gln Asp Arg Glu Gly
159      130             135             140
161 Ala Gly Arg Met Arg Val Val Gly Trp Gly Leu Gly Ser Ala Ser Pro
162 145             150             155             160
164 Glu Gly Gln Lys Ala Arg Asp Leu Arg Thr Pro Lys His Lys Val Ser
165      165             170             175
167 Glu Gln Arg Pro Gly Thr Pro Gly Pro Pro Pro Pro Glu Gly Ala Gln
168      180             185             190
170 Gly Asp Gly Cys Arg Gly Val Ala Phe Asn Val Met Phe Ser Ala Pro
171      195             200             205
173 His Ile
174      210
177 <210> SEQ ID NO: 6
178 <211> LENGTH: 632
179 <212> TYPE: DNA
180 <213> ORGANISM: Homo sapiens
182 <220> FEATURE:
183 <221> NAME/KEY: CDS
184 <222> LOCATION (53) ..(595)
186 <400> SEQUENCE: 6
187 tctctgtggg cctgacctt ctctctgaga gccgggcaga ggctccggag cc atg      55
188 Met
189 1
191 cag gcc gaa ggc cag ggc aca ggg ggt tcg acg ggc gat gct gat ggc      103
192 Gln Ala Glu Gly Gln Gly Thr Gly Gly Ser Thr Gly Asp Ala Asp Gly
193      5              10              15
195 cca gga ggc cct ggc att cct gat ggc cca ggg ggc aat gct ggc ggc      151
196 Pro Gly Gly Pro Gly Ile Pro Asp Gly Pro Gly Gly Asn Ala Gly Gly
197      20              25              30
199 cca gga gag gag ggt gcc acg ggc aga ggt ccc cgg ggc gca ggg      199
200 Pro Gly Glu Ala Gly Ala Thr Gly Gly Arg Gly Pro Arg Gly Ala Gly
201      35              40              45
203 gca gca agg gcc tcg ggg ccg aga gga ggc gcc ccg cgg ggt ccg cat      247
204 Ala Ala Arg Ala Ser Gly Pro Arg Gly Gly Ala Pro Arg Gly Pro His

```

## RAW SEQUENCE LISTING

DATE: 03/29/2001

PATENT APPLICATION: US/09/341,829A

TIME: 11:14:54

Input Set : A:\es.txt

Output Set: N:\CRF3\03292001\I341829A.raw

```

205 50          55          60          65
207 ggc ggt gcc get tct gcg cag gat gga agg tgc ecc tgc ggg gcc agg 295
208 Gly Gly Ala Ala Ser Ala Gln Asp Gly Arg Cys Pro Cys Gly Ala Arg
209          70          75          80
211 agg cgg gac agc cgc ctg ctt cag ttg cac atc acg atg cct ttc tgg 343
212 Arg Pro Asp Ser Arg Leu Leu Gln Leu His Ile Thr Met Pro Phe Ser
213          85          90          95
215 tgg ecc atg gaa gcg gag ctg gtc cgc agg atc ctg tcc cgg gat gcc 391
216 Ser Pro Met Glu Ala Glu Leu Val Arg Arg Ile Leu Ser Arg Asp Ala
217          100          105          110
219 gca cct ctc ecc cga cca ggg gcg gtt ctg aag gac ttc acc gtg tcc 439
220 Ala Pro Leu Pro Arg Pro Gly Ala Val Leu Lys Asp Phe Thr Val Ser
221          115          120          125
223 ggc aac cta ctg ttt atc cga ctg act gct gca gac cac cgc caa ctg 487
224 Gly Asn Leu Leu Phe Ile Arg Leu Thr Ala Ala Asp His Arg Gln Leu
225 130          135          140          145
227 cag ctc tcc atc agc tcc tgt ctc cag cag ctt tcc ctg ttg atg tgg 535
228 Gln Leu Ser Ile Ser Ser Cys Leu Gln Gln Leu Ser Leu Leu Met Trp
229          150          155          160
231 atc acg cag tgc ttt ctg ecc gtg ttt ttg gct cag gct ecc tca ggg 583
232 Ile Thr Gln Cys Phe Leu Pro Val Phe Leu Ala Gln Ala Pro Ser Gly
233          165          170          175
235 cag agg cgc taagccagc ctggcgccc ttctaggtc atgctctc 632
236 Gln Arg Arg
237          180
240 <210> SEQ ID NO: 7
241 <211> LENGTH: 180
242 <212> TYPE: PRT
243 <213> ORGANISM: Homo sapiens
245 <400> SEQUENCE: 7
246 Met Gln Ala Glu Gly Gln Gly Thr Gly Gly Ser Thr Gly Asp Ala Asp
247 1          5          10          15
249 Gly Pro Gly Gly Pro Gly Ile Pro Asp Gly Pro Gly Gly Asn Ala Gly
250          20          25          30
252 Gly Pro Gly Glu Ala Gly Ala Thr Gly Gly Arg Gly Pro Arg Gly Ala
253          35          40          45
255 Gly Ala Ala Arg Ala Ser Gly Pro Arg Gly Gly Ala Pro Arg Gly Pro
256          50          55          60
258 His Gly Gly Ala Ala Ser Ala Gln Asp Gly Arg Cys Pro Cys Gly Ala
259 65          70          75          80
261 Arg Arg Pro Asp Ser Arg Leu Leu Gln Leu His Ile Thr Met Pro Phe
262          85          90          95
264 Ser Ser Pro Met Glu Ala Glu Leu Val Arg Arg Ile Leu Ser Arg Asp
265          100          105          110
267 Ala Ala Pro Leu Pro Arg Pro Gly Ala Val Leu Lys Asp Phe Thr Val
268          115          120          125
270 Ser Gly Asn Leu Leu Phe Ile Arg Leu Thr Ala Ala Asp His Arg Gln
271          130          135          140
273 Leu Gln Leu Ser Ile Ser Ser Cys Leu Gln Gln Leu Ser Leu Leu Met

```

## RAW SEQUENCE LISTING

DATE: 03/29/2001

PATENT APPLICATION US/09/341,829A

TIME: 11:14:54

Input Set : A:\es.txt

Output Set: N:\CRF3\03292001\I341829A.raw

```

274 145          150          155          160
275 Trp Ile Thr Gln Cys Phe Leu Pro Val Phe Leu Ala Gln Ala Pro Ser
277          165          170          175
279 Gly Gln Arg Arg
280          180
283 2210> SEQ ID NO: 8
284 2211> LENGTH: 755
285 2212> TYPE: DNA
286 2213> ORGANISM: Homo sapiens
288 2220> FEATURE:
289 2221> NAME/KEY: CDS
290 2222> LOCATION: (51)..(593)
292 2400> SEQUENCE: 8
293 ctctgtggggc ctgaccttct ctctgagagc cgggcagagg ctccggagcc atg cag      56
294          Met Gln
295          1
297 gcc gaa ggc cgg ggc aca ggg ggt tcg acg ggc gat gct gat ggc cca      104
298 Ala Glu Gly Arg Gly Thr Gly Gly Ser Thr Gly Asp Ala Asp Gly Pro
299          5          10          15
301 gga ggc cct ggc att cct gat ggc cca ggg ggc aat gct ggc ggc cca      152
302 Gly Gly Pro Gly Ile Pro Asp Gly Pro Gly Gly Asn Ala Gly Gly Pro
303          20          25          30
305 gga gag gcg ggt gcc acg ggc ggc aga ggt ccc cgg ggc gca ggg gca      200
306 Gly Glu Ala Gly Ala Thr Gly Gly Arg Gly Pro Arg Gly Ala Gly Ala
307          35          40          45          50
309 gca agg gcc tcg ggg ccg gga gga ggc gcc ccg cgg ggt ccg cat ggc      248
310 Ala Arg Ala Ser Gly Pro Gly Gly Gly Ala Pro Arg Gly Pro His Gly
311          55          60          65
313 ggc gcg gct tca ggg ctg aat gga tgc tgc aga tgc ggg gcc agg ggg      296
314 Gly Ala Ala Ser Gly Leu Asn Gly Cys Cys Arg Cys Gly Ala Arg Gly
315          70          75          80
317 ccg gag agc cgc ctg ctt gag ttc tac ctc gcc atg cct ttc gcg aca      344
318 Pro Glu Ser Arg Leu Leu Glu Phe Tyr Leu Ala Met Pro Phe Ala Thr
319          85          90          95
321 ccc atg gaa gca gag ctg gcc cgc agg agc ctg gcc cag gat gcc cca      392
322 Pro Met Glu Ala Glu Leu Ala Arg Arg Ser Leu Ala Gln Asp Ala Pro
323          100          105          110
325 ccg ctt ccc gtg cca ggg gtg ctt ctg aag gag ttc act gtg tcc ggc      440
326 Pro Leu Pro Val Pro Gly Val Leu Leu Lys Glu Phe Thr Val Ser Gly
327          115          120          125          130
329 aac ata ctg act atc cga ctg act gct gca gac cac cgc caa ctg cag      488
330 Asn Ile Leu Thr Ile Arg Leu Thr Ala Ala Asp His Arg Gln Leu Gln
331          135          140          145
333 ctc tcc atc agc tcc tgt ctc cag cag ctt tcc ctg ttg atg tgg atc      536
334 Leu Ser Ile Ser Ser Cys Leu Gln Gln Leu Ser Leu Leu Met Trp Ile
335          150          155          160
337 acc cag tgc ttt ctg ccc gtg ttt ttg gct cag cct ccc tca ggg cag      584
338 Thr Gln Cys Phe Leu Pro Val Phe Leu Ala Gln Pro Pro Ser Gly Gln
339          165          170          175

```

VERIFICATION SUMMARY

DATE: 03/29/2001

PATENT APPLICATION: US/09/341,829A

TIME: 11:14:55

Input Set : A:\es.txt

Output Set: N:\CRF3\03292001\I341829A.raw

L:18 M:289 W: Numeric Identifier Missing or Out-Of-Order, <150> PRIOR APP FILING DATE  
L:19 M:283 W: Missing Blank Line separator, <160> field identifier